

**Abstract**

**CONCATENATION OF CONTAINERS IN SYNCHRONOUS DIGITAL HIERARCHY NETWORK**

A method of transmitting OSI layer 2 datacoms data by direct incorporation  
5 into a plurality of synchronous digital hierarchy virtual containers is disclosed, in  
which a higher bit rate OSI layer 2 data frame is multiplexed into a plurality of  
lower bit rate SDH (or SONET) virtual containers, which are transmitted  
simultaneously and in parallel over a synchronous communications network. The  
10 plurality of virtual containers are virtually concatenated by association of the  
payloads of the plurality of virtual containers. Re-assembly of the OSI layer 2  
data frames from a plurality of virtually concatenated VCs is achieved by storing  
each received VC payload corresponding to an OSI layer 2 data frame in a  
corresponding respective memory location, and alternately reading interleaved  
bytes from the plurality of payloads under control of a plurality of read pointers.

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